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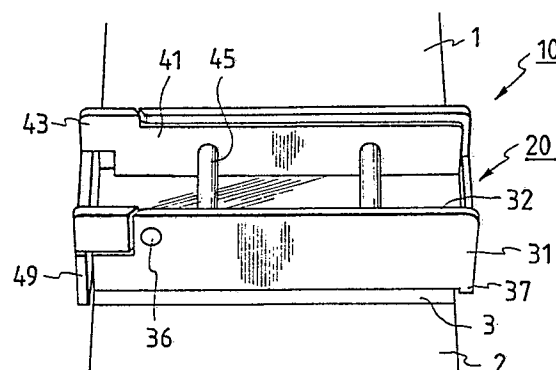
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54 **A binder assembly.**

57 A binder assembly (20) comprising a binder cover and a binder body is detachably coupled to a file and has two protrusions (37, 49) formed at the outer sides of one end of the binder cover and body, which can cover the upper and lower ends of a guide card mounted on a shalfback (3) of the file to keep the guide card at the suitable position thereon.

FIG. 5



Description

A BINDER ASSEMBLY

This invention relates to a binder assembly.

A conventional file has a transparent plastic sheet mounted on the outer face of a shelfback of a file. A guide card is disposed in the aperture between the shelfback and the plastic sheet. However, the guide card sometimes falls through the aperture, because there is no stop at the upper and lower ends of the aperture.

Further, when such file is placed on a shelf or a desk, the guide card often protrudes from the upper or lower end of the shelfback and contacts the shelf or the desk. Consequently, the upper and lower ends of the guide card become damaged and its appearance is affected.

An object of the present invention is to provide a binder assembly which keeps the guide card at a suitable position on the shelfback of the file.

According to the present invention there is provided a binder assembly for attachment to a shelfback of a file which binder assembly comprises a binding mechanism, a binder cover and a binder body, whereby the binder cover and the binder body are adapted to be coupled together, the assembly having two protrusions which in use project outwardly and are spaced apart along the length of the shelfback. The protrusions are provided so that they can cover the upper and lower ends of the guide card and can keep the card at the suitable position on the shelfback of the file.

Preferably the binder body is a sliding fit within the binder cover, said binder body having a central panel and two side panels connected to opposite edges of the central panel and said binder cover having a bottom plate, two side plates connected to opposite edges of the bottom plate, an end wall between the side plates to limit the sliding of the binder body and inwardly extending flanges on the side plates under which flanges the respective side panels of the binder body are disposed.

In preferred embodiments interlocking means are provided between the binder body and the binder cover, which interlocking means comprises at least one pin and hole arrangement comprising a pin and a hole formed one on a side panel and the other on the corresponding side plate, the side panel being resiliently deflectable to enable the pin to engage the hole.

Conveniently one protrusion is constituted by an extension of said end wall and the other protrusion is formed as an extension of an end panel of the binder body.

It is another preferred feature that the binder body and binder cover are formed from a low elasticity, hard plastics material and also that the binding mechanism comprises binding pipes attached to one side panel and binding rods attached to the other side panel, which side panels are hingedly connected to the central panel to enable engagement and disengagement of the binding pipes and rods.

There follows a detailed description of one

embodiment of the invention which description makes reference to the accompanying drawings in which:

Figure 1 is a perspective view showing a binder cover of a binder assembly in accordance with the present invention;

Figure 2 is a perspective view in the direction of the arrow R in Figure 1;

Figure 3 is a perspective view showing a binder body of the binder assembly in an open position;

Figure 4 is a perspective view showing the binder body in a closed position;

Figure 5 is a perspective view showing the binder assembly attached to a file; and

Figure 6 is a perspective view showing the shelfback of the file.

Figure 1 is a perspective view showing a binder cover 30. Figure 2 is a perspective view taken along an arrow R in Figure 1. The binder cover 30 can be made of a hard plastics of a low elasticity and has right and left side plates 31, 31, flanges 32, 32 extending inwardly from the upper ends of the side plates, a bottom plate 33, and an end plate 34. Each side plate 31 has a cut-away recess 35 at the open end of the binder cover 30. The reference number 36 denotes a hole for a binder body to be mentioned later. A Protrusion 37 is formed on the outer side of the end plate 34 and extends outwardly away from the binder cover.

Figure 3 illustrates a binder body 40 in an open position while Figure 4 illustrates the binder body 40 in the closed position. The binder body 40 has a central bottom panel 44 and right and left hinged side panels 41, 42 hingedly connected by virtue of reduced thickness grooves 47 to the bottom panel 44.

One hinged side panel 41 is provided with a plurality of binding pipes 45, 45 (two pipes in the drawing) while the other hinged side panel 42 is provided with a plurality of binding rods 46 at the positions corresponding to those of the binding pipes 45. Further, the hinged side panels 41, 42 have a clamp portion 43 at one end thereof. The bottom panel 44 has an end protrusion 49 at the side of the clamp 43 projecting outwardly away from the bottom panel 44. The side panels 41, 42 have a pin 50 on their outer surfaces, which engages with the hole 36 formed in the body 30.

When the binder body 40 is to be closed, the hinged side panels 41, 42 are moved to the centre of the bottom panel 44 from both sides, the free ends of the binding rods 46 entering into the binding pipes 45. Both hinged side panels are engaged with each other and thus the binder body 40 is brought into the closed channel-like position as shown in Figure 4.

When a user presses the clamps 43 towards each other and inserts the binder body 40 into the binder cover 30 through the open end thereof in the direction shown by the arrow D in Figures 1 and 4, the binder body 40 is coupled to the binder cover 30

to form a binder assembly. Thus, the upper edges of the side panels 41, 42 engage with the lower sides of the flanges 32, and the top end of the side panels 41, 42 contact the end plate 34. The clamp portions 43 are disposed in the cut-away recesses 35 of the side plate 31 and the pins 50 of the binder body 40 are engaged in the respective holes 36 of the binder cover 30. Thus coupling is ensured by the action of a recess 48 formed in the vicinity of clamp portion 43 between the bottom panel 44 of the binder body and the hinged side panels 41, 42 as shown in Figure 3 and 4, which allows the inward deflection of the side panels 41, 42.

Figure 5 illustrates a binder assembly 20 attached to a shelfback 3 of a file 10. The binder assembly 20 is constructed in combination of the binder cover 30 and the binder body 40 as mentioned above. Figure 6 illustrates the shelfback 3. The reference numbers 1 and 2 show the covers of the file 10. A transparent plastic sheet 4 is mounted on the shelfback 3 to define an aperture which receives a guide card. The aperture for the guide card is provided, as in an eave-like manner, with the end protrusion 49 of the binder body 40 and the protrusion 37 of the binder cover 30 at the opposite ends of the aperture so that the end protrusion 49 and the protrusion 37 cover the guide card at the upper and lower ends as shown in Figure 6.

In use of the binder assembly 20, the binding pipes 45 receive a document 60, the hinged side panels 41, 42 are turned toward each other to cause the binding rods 46 to be inserted into the binding pipes 45, and the binder body 40 in the closed position is inserted into the binder cover 30.

When the clamps 43 are pressed toward each other by the fingers of the user in order to open the binder body 40, the hinged side panels 41, 42 are deflected inwardly as mentioned above so that the pins 50 are disengaged from the holes 36 and the binder body 40 is drawn from the binder cover 30.

When the binder assembly is in use in the closed position, the protrusions of the binder cover and the binder body can cover the upper and lower ends of the guide card, so that the guide card can not fall from the binder assembly.

When the binder assembly is placed on a shelf or a desk, the guide card does not stick out from the upper or lower end of the shelfback. Accordingly, the guide card will not be subjected to damage due to its direct contact with the shelf or the desk.

Claims

1. A binder assembly for attachment to a shelfback of a file which binder assembly comprises a binding mechanism, a binder cover and a binder body, whereby the binder cover and the binder body are adapted to be coupled together, the assembly having two protrusions which in use project outwardly and are spaced apart along the length of the shelfback.

2. A binder assembly as claimed in claim 1 wherein the binder body is a sliding fit within the binder cover, said binder body having a central

panel and two side panels connected to opposite edges of the central panel and said binder cover having a bottom plate, two side plates connected to opposite edges of the bottom plate, an end wall between the side plates to limit the sliding of the binder body and inwardly extending flanges on the side plates under which flanges the respective side panels of the binder body are disposed.

3. A binder assembly as claimed in claim 2 wherein interlocking means are provided between the binder body and the binder cover.

4. A binder assembly as claimed in claim 3 wherein the interlocking means comprises at least one pin and hole arrangement comprising a pin and a hole formed one on a side panel and the other on the corresponding side plate, the side panel being resiliently deflectable to enable the pin to engage the hole.

5. A binder assembly as claimed in any of claims 2 to 4 wherein one protrusion is constituted by an extension of said end wall.

6. A binder assembly as claimed in claim 5 wherein the other protrusion is formed as an extension of an end panel of the binder body.

7. A binder assembly as claimed in any one of claims 1 to 6 wherein the binder body and binder cover are formed from a low elasticity, hard plastics material.

8. A higher assembly as claimed in any of the preceding claims wherein the binding mechanism comprises binding pipes attached to one side panel and binding rods attached to the other side panel, which side panels are hingedly connected to the central panel to enable engagement and disengagement of the binding pipes and rods.

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FIG. 1

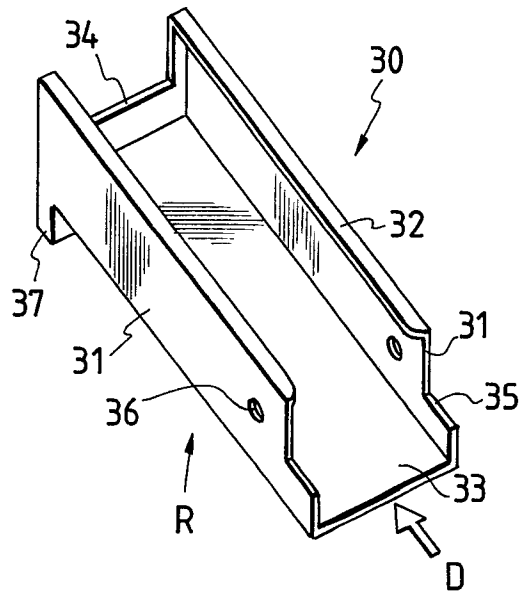


FIG. 2

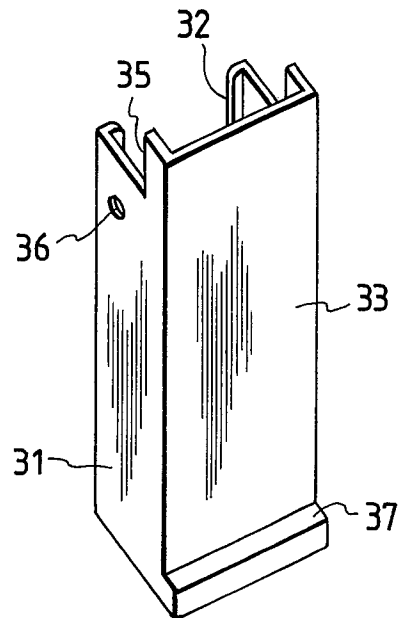


FIG. 3

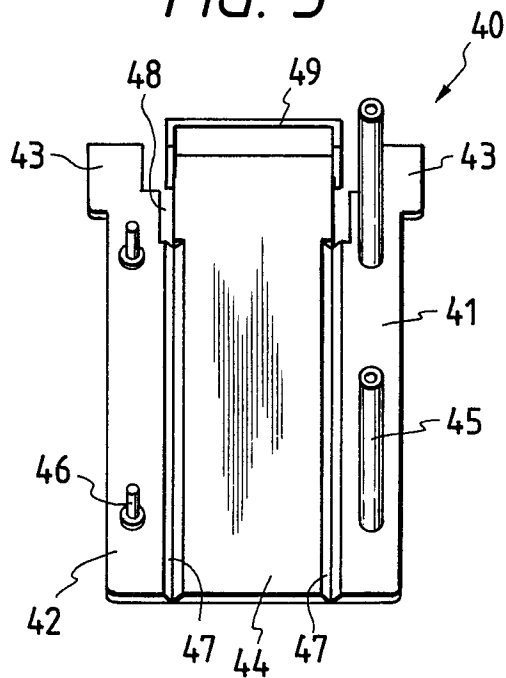


FIG. 4

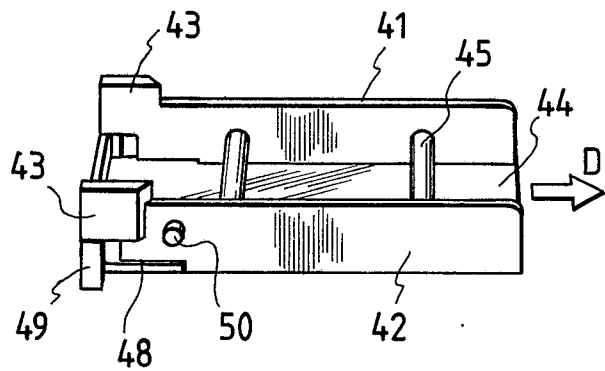


FIG. 5

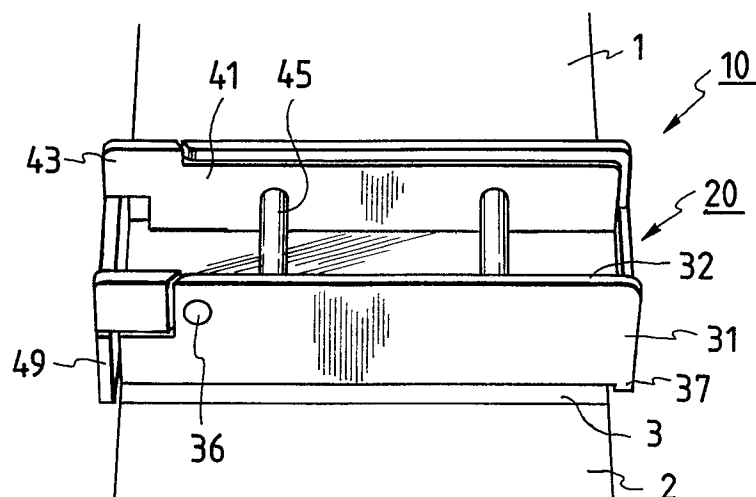


FIG. 6

